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10/611,449	07/01/2003	Tong Zhang	100202720-1	1631
22879 7590 07/08/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER SAUNDERS JR, JOSEPH	
			ART UNIT 2615	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/611,449	Applicant(s) ZHANG ET AL.	
	Examiner Joseph Saunders	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 39-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-17 and 39-62 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the communication filed February 14, 2008.

Claims 1 – 17 and 39 – 62 are currently pending and considered below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5, 6, 9 – 12, 17, 39 – 41, 45 – 48, 55, and 58 – 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jun (US 6,918,081 B1), hereinafter Jun, in view of Kulas (US 6,044,047), hereinafter Kulas.

Claim 1: Jun discloses an audio processing method, comprising: identifying audio summaries (“digest segments”) of respective audio pieces (“multimedia streams” e.g., music), wherein each of the audio summaries comprises digital content summarizing at least a portion of the respective audio piece (“A digest stream(highlight) of a multimedia stream is constructed by arranging audio-visual segments, each of which is the essence of an original stream in the development of a story,” Column 1 Lines 32 – 38); and the identifying comprises for each of the audio pieces selecting constituent segments of the audio piece as its respective ones of the audio summaries (“A digest stream(highlight) of a multimedia stream is constructed by arranging audio-visual segments, each of

which is the essence of an original stream in the development of a story,” Column 1 Lines 32 – 38”) and ranking its audio summaries into different levels of a respective audio summary hierarchy (“digest levels”). Jun further discloses concatenating the ones of the audio summaries ranked at a selected level of the audio summary hierarchies into a sequence (“digest streams”); and rendering the sequence (“Also, a user can browse a digest stream of a desired level for a desired time by using a multiple level digest stream provided,” Column 8 Line 63 – Column 9 Line 5).

Therefore, Jun anticipates all elements of claim 1 except that Jun is silent as to any transitional audio segments and browsing implementations, and therefore does not disclose determining transition audio segments each comprising a form of audio content that is different from the audio summaries and distinguishes the transition audio segment from the audio summaries; concatenating the transition audio segments and ones of the audio summaries ranked at a selected level of the audio summary hierarchies and the transition audio segments into a sequence in which at least one of the transition audio segments is between successive ones of the audio summaries.

Kulas discloses a similar method of using a short sample of an audio piece to quickly identify the audio piece and further discloses,

“A preferred embodiment of the present invention uses tone generator 154, shown in FIG. 2. Tone generator 154 outputs a tone to audio amplifier 114. The tone is used to indicate the end of a sample during sample playback mode and to indicate the start of a next sample. The use of tone generator 154 is optional as a brief gap in playback may be adequate to indicate that a new sample is starting.

Alternatively, a "click" or other audible indication can be used, or no indication at all. Another possibility is to use voice synthesis to announce the slot number of the CD sample being played overlaid with the playback of the sample during the scan mode. Other ways of the beginning and end of samples, and which sample is playing, are possible," Column 5 Lines 52 – 65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the transition audio segments taught by Kulas in the digest streams taught by Jun, since the transitional audio segments are used "to indicate the end of a sample during playback mode and to indicate the start of a next sample," Kulas Column 5 Lines 52 – 65, thereby allowing the user do distinguish when one sample ends and the other begins. In addition to the transitional segments allowing for smooth browsing as taught by Kulas, it would have also been obvious to one of ordinary skill in the art at the time of the invention to incorporate other aspects relating to browsing as taught by Kulas in the invention of Jun, since Jun also states "Meanwhile, the operation of browsing, recording and editing performed by the browsing/recording/editing unit 4 is carried out by a well-known technique of the convention art, and accordingly a detailed description thereof is omitted," Column 6 Lines 20 – 26.

Claim 17: Claim 17 is substantially similar to claim 1 and is rejected on the same grounds.

Claim 2: Jun and Kulas disclose the method of claim 1, wherein identical transition audio segments (“tone”) are rendered between pairs of sequential audio summaries (Kulas Column 5 Lines 52 – 65).

Claim 5: Jun and Kulas disclose the method of claim 1, wherein the audio summaries and the interleaved transition audio segments are rendered consecutively (Kulas Column 5 Lines 52 – 65).

Claim 6: Jun and Kulas disclose the method of claim 1, wherein each audio summary is a representative segment of a respective associated audio piece (“A digest stream(highlight) of a multimedia stream is constructed by arranging audio-visual segments, each of which is the essence of an original stream in the development of a story,” Jun Column 1 Lines 32 – 38).

Claim 9: Jun and Kulas disclose the method of claim 1, wherein at least one audio summary is linked to an associated audio piece by a browsable link (Kulas Column 6 Lines 12 – 27).

Claim 10: Jun and Kulas disclose the method of claim 9, further comprising rendering a given one of the audio pieces linked by a browsable link to an associated one of the audio summaries in response to user input received during rendering of the associated audio summary, wherein the rendering comprises following the browsable link from the

associated audio summary to the given audio piece before rendering a successive one of the transition audio segments (Kulas Column 6 Lines 12 – 27).

Claim 11: Jun and Kulas disclose the method of claim 1, further comprising rendering a given audio piece beginning at a location in the given audio piece linked by a browsable link to an audio summary associated with the given audio piece, wherein the rendering comprises following the browsable link from the associated audio summary to the given audio piece (Kulas Column 6 Lines 12 – 27).

Claim 12: Jun and Kulas disclose the method of claim 11, further comprising rendering a second audio piece at a location in the second audio piece linked to a successive audio summary associated with the second audio piece (Each CD has an associated sample and therefore the system can render a second audio piece or CD at a location in the second audio piece linked to a successive audio summary or sample associated with the second audio piece, Kulas Column 6 Lines 12 – 27).

Claim 39: Jun and Kulas disclose the method of claim 1, further comprising following links between multiple ones of the audio summaries and one of the audio pieces (Jun Figures 1 – 3).

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Claim 40: Jun and Kulas disclose the method of claim 1, wherein each of the transition audio segments corresponds to a monotone sound ("tone", Kulas Column 5 Lines 52 – 53).

Claim 60: Claim 60 is substantially similar to claim 1 and is rejected on the same grounds.

Claim 41: Jun and Kulas disclose the method of claim 1, wherein the rendering comprises rendering the audio summaries and the transition audio segments consecutively without any gaps between the audio summaries and the transition audio segments ("a brief gap may be adequate", implying that when the "tone" is used no "gaps" occur between the audio summaries and the transition audio segments, Kulas Column 5 Lines 52 – 65).

Claim 55: Claim 55 is substantially similar to claim 41 and is rejected on the same grounds.

Claim 45: Jun and Kulas disclose the method of claim 1, wherein at least one of the audio summaries is associated with a pointer ("flag") to a location in a respective one of the audio pieces (Kulas Column 3 Lines 27 – 40 and Column 6 Lines 12 – 27).

Claim 46: Jun and Kulas disclose the method of claim 1, further comprising following a pointer from a given audio summary being rendered to a location in an associated audio piece specified by the pointer, and rendering the associated audio piece beginning at the specified location (Kulas Column 3 Lines 27 – 40 and Column 6 Lines 12 – 27).

Claim 47: Jun and Kulas disclose the method of claim 46, further comprising terminating the rendering of the associated audio piece and resuming the sequential rendering of the audio summaries and the transition audio segments (“The SCAN control allows a user to initiate the quick-scan of the present invention,” Kulas Column 5 Lines 7 – 17, thereby “terminating” the current operating mode or the rendering of audio pieces).

Claims 58 and 59: Claims 58 and 59 are substantially similar in scope to claims 46 and 47 and are rejected on the same grounds.

Claim 48: Jun and Kulas disclose the method of claim 47, wherein the terminating is initiated in response to user input (“SCAN” button, Kulas Column 5 Lines 7 – 17).

Claim 61: Jun and Kulas disclose the method of claim 1, wherein the rendering comprises rendering only one transition audio segment between each sequential pair of the audio summaries (Kulas Column 5 Lines 52 – 65).

Claim 62: Jun and Kulas disclose the method of claim 1, wherein the identifying comprises identifying the audio summaries of the audio pieces based on links ("flags") between the audio pieces and respective ones of the audio summaries (Column 3 Lines 27 – 40 and Column 6 Lines 12 – 27).

4. Claims 7, 8, 15, 42 – 44, 50, 51, 54, 56, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jun and Kulas in view of Csicsatka et al. (US 2006/0235550 A1), hereinafter Csicsatka.

5. US 2006/0235550 A1 to Csicsatka et al. is prior art under 35 USC 102(e) with respect to this application due to its continuity through international application WO 2004/097832 A2 which published in English and designates the United States and has an effective filing date of 24 April 2003 due to its priority to US Provisional Application 60/465,156 for any matter disclosed in that provisional application. Copies of the published international application and the US provisional application have been provided in the previous Office action. Text references below are made with respect to the provisional application.

Claim 7: Jun and Kulas disclose the method of claim 1, but do not disclose further comprising classifying audio pieces into categories in response to user input received during rendering of the associated audio summaries. Csicsatka discloses a similar

audio processing method (Method of Creating Playlists using Audio Clips), comprising: identifying audio summaries ("Audio Clips") of respective audio pieces ("songs"), wherein each of the audio summaries comprises digital content summarizing at least a portion of the respective audio piece ("Audio Clips can be used to identify content without having to play the entire selection or look at a display," page 1 sixth paragraph). Csicsatka further discloses, "The user selects an Album. Audio Clips from the songs from the album start to play in album order. While the Audio Clip is playing a press of the Favorites Key will add it to the playlist. Once it has been added the player advances to the next song," page 1 example 1 see also "numeric keypad" and page 2 first paragraph. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the Favorites Key or numeric keypad during playback of audio summaries as disclosed by Csicsatka in the invention of Jun and Kulas, thereby giving the user the ability to quickly classify songs into categories for the purpose of building a playlist.

Claim 8: Jun, Kulas, and Csicsatka disclose the method of claim 7, further comprising building a playlist based on categories assigned to a set of audio pieces ("selected track can be placed in one of a plurality of playlists," Csicsatka page 2 first paragraph).

Claims 43, 44, 50, 51, 56, and 57: Claims 43, 44, 50, 51, 56, and 57 are substantially similar in scope to claims 7 and 8 and are rejected on the same grounds.

Claim 42: Jun and Kulas disclose the method of claim 1, but do not disclose further comprising, in response to user input during rendering of a current one of the audio summaries that comprises digital content summarizing at least a portion of a given one of the audio pieces, rendering another audio summary in a hierarchical cluster of audio summaries each of which comprises digital content summarizing at least a portion of the given audio piece, wherein the hierarchical cluster includes the current audio summary.

Csicsatka discloses a similar audio processing method (Method of Creating Playlists using Audio Clips), comprising: identifying audio summaries ("Audio Clips") of respective audio pieces ("songs"), wherein each of the audio summaries comprises digital content summarizing at least a portion of the respective audio piece ("Audio Clips can be used to identify content without having to play the entire selection or look at a display," page 1 sixth paragraph). Csicsatka also discloses ordering audio summaries in a sequence based on similarity to a given audio summary ("The user selects an Artist, Genre or Year, Audio Clips from that group start to play. While the Audio clip is playing a press of the Favorites Key will add it to the playlist. Once it has been added the player advances to the next song in that group," page 1 example 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to playback the audio summaries based on a "hierarchical cluster" or "group" as disclosed by Csicsatka in the invention of Jun and Kulas thereby allowing for user customized playback based on Artist, Genre, Year, of a group (Csicsatka, page 1 example 2).

Claim 15: Jun discloses an audio processing method, comprising: sequentially rendering audio summaries (“Digest segment structures can be sequentially arranged in a time sequence, each of which has its digest level and time range information(start point and end point or start point and duration),” Column 4 Lines 30 – 40), wherein each audio summary comprises digital content summarizing at least a portion of a respective associated audio piece (“A digest stream(highlight) of a multimedia stream is constructed by arranging audio-visual segments, each of which is the essence of an original stream in the development of a story,” Column 1 Lines 32 – 38), wherein each audio piece is associated with multiple audio summaries (Figures 1 – 3).

Therefore, Jun anticipates all elements of claim 13 except that Jun is silent as to any transitional audio segments and browsing implementations, and therefore does not disclose sequentially rendering audio summaries and transition audio segments with at least one transition audio segment rendered between each pair of sequential audio summaries, wherein each of the audio summaries comprises digital content summarizing at least a portion of a respective associated audio piece; and Jun further does not disclose a single audio summary is rendered automatically for each audio piece; and rendering an audio summary for a given audio piece in response to user input received during rendering of a preceding audio summary associated with the given audio piece.

Kulas discloses a similar method of using a short sample of an audio piece to quickly identify the audio piece and further discloses,

"A preferred embodiment of the present invention uses tone generator 154, shown in FIG. 2. Tone generator 154 outputs a tone to audio amplifier 114. The tone is used to indicate the end of a sample during sample playback mode and to indicate the start of a next sample. The use of tone generator 154 is optional as a brief gap in playback may be adequate to indicate that a new sample is starting. Alternatively, a "click" or other audible indication can be used, or no indication at all. Another possibility is to use voice synthesis to announce the slot number of the CD sample being played overlaid with the playback of the sample during the scan mode. Other ways of the beginning and end of samples, and which sample is playing, are possible," Column 5 Lines 52 – 65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the transition audio segments taught by Kulas in the digest streams taught by Jun, since the transitional audio segments are used "to indicate the end of a sample during playback mode and to indicate the start of a next sample," Kulas Column 5 Lines 52 – 65, thereby allowing the user to distinguish when one sample ends and the other begins.

Regarding a single audio summary is rendered automatically for each audio piece; and rendering an audio summary for a given audio piece in response to user input received during rendering of a preceding audio summary associated with the given audio piece; Csicsatka discloses a similar audio processing method (Method of Creating Playlists using Audio Clips), comprising: identifying audio summaries ("Audio Clips") of respective audio pieces ("songs"), wherein each of the audio summaries comprises

digital content summarizing at least a portion of the respective audio piece ("Audio Clips can be used to identify content without having to play the entire selection or look at a display," page 1 sixth paragraph). Csicsatka further discloses, "The user selects an Album. Audio Clips from the songs from the album start to play in album order. While the Audio Clip is playing a press of the Favorites Key will add it to the playlist. Once it has been added the player advances to the next song. If the Audio Clip is set to 5 seconds and there are 12 songs on the album a playlist could be created in less than 60 seconds," page 1 example 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that since Jun is silent to browsing implementations, "Meanwhile, the operation of browsing, recording and editing performed by the browsing/recording/editing unit 4 is carried out by a well-known technique of the convention art, and accordingly a detailed description thereof is omitted," Column 6 Lines 20 – 26, to automatically render a single audio summary for a each audio piece; and rendering an audio summary for a given audio piece in response to user input received during rendering of a preceding audio summary associated with the given audio piece as taught by Csicsatka, thereby giving the user the ability to quickly classify songs into categories for the purpose of building a playlist.

Claim 54: Claim 54 is substantially similar in scope to claim 15 and is rejected on the same grounds.

6. Claims 13, 14, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jun in view of Kulas and Herley et al. (US 2004/0002310 A1), hereinafter Herley.

Claim 13: Jun discloses an audio processing method, comprising: sequentially rendering audio summaries (“Digest segment structures can be sequentially arranged in a time sequence, each of which has its digest level and time range information(start point and end point or start point and duration),” Column 4 Lines 30 – 40), wherein each of the audio summaries comprises digital content summarizing at least a portion of a respective associated audio piece (“A digest stream(highlight) of a multimedia stream is constructed by arranging audio-visual segments, each of which is the essence of an original stream in the development of a story,” Column 1 Lines 32 – 38); receiving a user request to browse the audio summaries (“Digest a music to 100 seconds focusing on piano,” Column 7 Line 53); ordering ones of the audio summaries into a sequence (“digest streams”) in order of audio feature vector closeness (“piano”) when the user request was received; and rendering the sequence (“Also, a user can browse a digest stream of a desired level for a desired time by using a multiple level digest stream provided,” Column 8 Line 63 – Column 9 Line 5).

Therefore, Jun anticipates all elements of claim 13 except that Jun is silent as to any transitional audio segments and browsing implementations, and therefore does not disclose sequentially rendering audio summaries and transition audio segments with at

least one transition audio segment rendered between each pair of sequential audio summaries, wherein each of the audio summaries comprises digital content summarizing at least a portion of a respective associated audio piece; and Jun further does not disclose ordering ones of the audio summaries into a sequence in order of audio feature vector closeness to a given one of the audio summaries being rendered when the user request was received.

Kulas discloses a similar method of using a short sample of an audio piece to quickly identify the audio piece and further discloses,

“A preferred embodiment of the present invention uses tone generator 154, shown in FIG. 2. Tone generator 154 outputs a tone to audio amplifier 114. The tone is used to indicate the end of a sample during sample playback mode and to indicate the start of a next sample. The use of tone generator 154 is optional as a brief gap in playback may be adequate to indicate that a new sample is starting. Alternatively, a "click" or other audible indication can be used, or no indication at all. Another possibility is to use voice synthesis to announce the slot number of the CD sample being played overlayed with the playback of the sample during the scan mode. Other ways of the beginning and end of samples, and which sample is playing, are possible," Column 5 Lines 52 – 65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the transition audio segments taught by Kulas in the digest streams taught by Jun, since the transitional audio segments are used "to indicate the end of a sample during playback mode and to indicate the start of a next sample," Kulas Column

5 Lines 52 – 65, thereby allowing the user do distinguish when one sample ends and the other begins.

Regarding ordering ones of the audio summaries into a sequence in order of audio feature vector closeness to a given one of the audio summaries being rendered when the user request was received; Herley discloses a similar method of browsing or scanning, “The scan operation is performed by playing segments of a sub-collection of the media collection, stored in the media database 408, until a user cancels the scan or indicates a desired media item or desired seed item via the second input,” [0068]. Herley teaches, “Referring once again to the scan list engine 402, the segments played are typically about 10 seconds each, but alternate aspects of the invention can utilize various lengths of time. Additionally, the segments are identified so as to be representative of the media item. A more representative segment can be at a certain location of the song. A database of segment identifiers can be employed to obtain appropriate segments. Additionally, segments can simply start 30 seconds into a song. Other suitable approaches can be utilized with the invention,” [0070]. Herley goes on to teach, “The similarity subsystem 1100 can be employed to, for example, generate playlists and/or to generate a sub-collection of media items (e.g., for use by the scan list engine 402 of FIG. 4),” [0086]. Herley also teaches, “It is also appreciated that the subsystem 1100 can be employed by a component or system to generate a sub-collection of media items for use in implementing a scan function described supra. Turning now to FIG. 12, a block diagram of a similarity subsystem 1200 and a similarity value generator 1240 employed in computing a similarity value 1260 is depicted. The

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similarity subsystem 1200 accepts as inputs a seed item feature vector 1210 and a candidate item feature vector 1220. While FIG. 12 refers primarily to feature vectors and feature vector similarity processing, it is to be appreciated that other similarity analysis techniques may be employed in accordance with the present invention,” [0091] – [0092]. Finally, Herley teaches after receiving a seed item, “items or tracks in the playlist are sorted according to their respective final similarity values. Thus, items that are more similar are played or encountered prior to less similar items. This is generally desirable because, for example, a user would likely prefer to hear the more similar songs first,” [0116].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that since Jun is silent to browsing implementations, “Meanwhile, the operation of browsing, recording and editing performed by the browsing/recording/editing unit 4 is carried out by a well-known technique of the convention art, and accordingly a detailed description thereof is omitted,” Column 6 Lines 20 – 26, to order ones of the audio summaries into a sequence in order of audio feature vector closeness to a given one of the audio summaries being rendered when the user request was received as taught by Herley in the invention of Jun and Kulas, thereby allowing scanning of representative audio segment to occur in an order where more similar segments are played or encountered prior to less similar segments.

Claim 14: Jun, Kulas, and Herley disclose the method of claim 13, wherein audio summaries are rendered in accordance with the ordered sequence (“Thus, items that are more similar are played or encountered prior to less similar items,” Herley [0116]).

Claims 52 and 53: Claims 52 and 53 are substantially similar in scope to claims 13 and 14 and are rejected on the same grounds.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jun and Kulas in view of Takenaka et al. (US 6,807,450 B1), hereinafter Takenaka.

Claim 16: Jun and Kulas disclose the method of claim 1, but do not disclose normalizing audio summaries to a common loudness level. Takenaka discloses a digital audio reproduction method (Fig. 5E; column 12, lines 11 – 29) that provides transition audio segments between the information pieces (i.e., music items). Takenaka further discloses that such an arrangement provides a natural linkage between songs, enhancing listener enjoyment (column 12, lines 42 – 45) and further discloses reproduction at a constant level (i.e., normalizing to a common loudness level) (Fig 5E; column 12, lines 30 – 36). Therefore, it would have been obvious to one skilled in the art at the time of the invention to reproduce the audio summaries of Jun and Kulas at a constant or normalized level as disclosed by Takenaka for the purpose of realizing the

aforesaid advantages and also preventing sudden disruptive volume changes between audio summaries of different sources that may have been recorded at different levels.

8. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jun and Kulas in view of Setogawa et al. (US 6,424,793 B1), hereinafter Setogawa.

Claim 49: Jun and Kulas disclose the method of claim 47, but do not disclose wherein the terminating is initiated in response to completion of the rendering of the associated audio piece.

Setogawa discloses a replay apparatus that returns to a selection function upon termination of a tune replay (Fig. 18, steps S103 - S104; column 19, lines 1 – 19).

Setogawa further discloses that such an arrangement provides improved ease of operation (column 20, lines 48-56). It would have been obvious to one skilled in the art at the time of the invention to apply return to selection function as taught by Setogawa to the invention of Jun and Kulas for the purpose of realizing the aforesaid advantage.

Allowable Subject Matter

9. Claim 3 is allowable matter for the reasons stated in the office action dated December 8, 2006.

10. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 2, 5 – 17, 39 – 59 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni can be reached on (571) 272-7505. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./

Examiner, Art Unit 2615

/Suhan Ni/

Primary Examiner, Art Unit 2614